



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/524,713

09/21/2005

Niels Holmenlund

G0365.0376

8418

7590 05/14/2008
Dickstein Shapiro Morin & Oshinsky
1177 Avenue of the Americas
41th floor
New York, NY 10036-2714

EXAMINER

HAYES, KRISTEN C

ART UNIT

PAPER NUMBER

3643

MAIL DATE

DELIVERY MODE

05/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/524,713	HOLMENLUND, NIELS	
	Examiner	Art Unit	
	Kristen C. Hayes	3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20050215</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the multiple apertures, as required by claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

Art Unit: 3643

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 3 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 2, 3 and 7 recites the broad recitation of a range of numbers, and the claim also recites a preferable range of numbers within the previously recited range which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 4, 6, 7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Deckers WO 96/03030.

8. Regarding claims 1 and 10, Deckers discloses a first growth substrate (18) in which a plant (17) is positioned for growth which has a first water uptake capacity and a first sinking time S1, in fluid communication with a second mineral rock wool substrate (11) which has a density of 60kg/m³ (Deckers, page 2: lines 32-33) and has a second water uptake capacity which is less than the first water uptake capacity and a second sinking time S2 with the value of S1 greater than the value of S2 (as per applicant's disclosure. Decker discloses the substrate being peat, Deckers, page 1: lines 9-10) with the second substrate being flooded with water at intervals (Deckers, page 5: lines 18-19). Given the structure, the method is inherently performed.

9. Regarding claim 2, Deckers further discloses the mineral wool having a density of 60kg/m³ (Deckers, page 2: lines 32-33). Given the structure, the method is inherently performed.

10. Regarding claim 4, Deckers further discloses the mineral wool fibers having a substantially horizontal orientation (Deckers, page 4: lines 32-33). Given the structure, the method is inherently performed.

11. Regarding claim 6, Deckers further discloses the plant grown under conditions of drought stress (Deckers, page 5: lines 18-19). Given the structure, the method is inherently performed.

Art Unit: 3643

12. Regarding claim 7, Deckers further discloses the first growth substrate comprising peat (Deckers, page 1: lines 9-10). Given the structure, the method is inherently performed.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deckers WO 96/03030 in view Blaakmeer et al US 7,104,006.

15. Regarding claim 3, Deckers discloses the device of claim 1 but does not disclose the thickness of the mineral wool fibers. Blaakmeer teaches the fibers of a mineral wool substrate being 2 microns (Blaakmeer, column 1: lines 25-27). It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mineral wool fibers of Deckers so they were 2 microns as taught by Blaakmeer to alter the density of the mineral wool. Given the structure, the method is inherently performed.

16. Regarding claim 5, Deckers discloses the device of claim 1 but does not disclose the mineral wool being bonded with a hydrophilic binder. Blaakmeer teaches a hydrophilic binder (Blaakmeer, column 4: line 43). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mineral wool of Deckers with the hydrophilic binder of Blaakmeer to impart the hydrophobic mineral wool matrix with hydrophilic properties, allowing it to uptake water more easily. Given the structure, the method is inherently performed.

Art Unit: 3643

17. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deckers WO 96/03030 in view of Struyk WO 92/13441.

18. Regarding claim 8, Deckers further discloses multiple plants (Deckers, Figure 3). Not disclosed are at least 10 plants with every plant within a pot. It would be obvious to grow any number of desired plants, depended on the users need. Struyk teaches a plant (6) within a pot (formed by 12) having a base (8)(Struyk, page 4: lines14-15) having apertures (17) with the second substrate layer of mineral wool (Struyk, abstract) contained in the pot and forming a barrier between the first growth substrate and the apertures (Struyk, Figure 1). It would have been obvious to modify the device of Deckers so that every plant was contained in a pot with the substrates of Deckers as to provide separate growing environments for each plant. Given the structure, the method is inherently performed.

19. Regarding claim 9, Deckers further discloses multiple plants (Deckers, Figure 3). Not discloses are at least 10 plants with every plant within a pot or the mineral wool in each pot being of the same size. It would be obvious to grow any number of desired plants, depended on the users need. Struyk teaches a plant (6) within a pot (formed by 12). Plants grown in pots are well known in the art. The mineral wool being the same size would provide consistent results from pot to pot and ensure the same volume of water was taken up in each pot. It would have been obvious to modify the device of Deckers so that every plant was contained in a pot with the substrates of Deckers as to provide separate growing environments for each plant, and to make the mineral wool the same size to provide consistent results from pot to pot. Given the structure, the method is inherently performed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen C. Hayes whose telephone number is 571-270-3093. The examiner can normally be reached on Monday-Thursday, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571)272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCH
6 May 2008

Peter Poon
Examiner
Art Unit 3643

/Peter M. Poon/
Supervisory Patent Examiner, Art Unit 3643